

ROUX ASSOCIATES, INC.

Environmental Consulting & Management

Memorandum

Date: January 22, 2018

To: Mike Cirian, USEPA

From: Michael Ritorto, Roux Associates, Inc.

CC: John Stroiazzo, Glencore

Steve Wright, CFAC Dick Sloan, MDEQ

Andrew Baris, Roux Associates, Inc.

Subject: Minutes for Project Update/Technical Meeting – January 16 - 17, 2018

CFAC Remedial Investigation / Feasibility Study

Columbia Falls, Montana

A project update and technical meeting was held on Tuesday, January 16, 2018 and January 17, 2018 at the CFAC facility (2000 Aluminum Drive, Columbia Falls, MT). The meeting was held to discuss the comments provided by USEPA and MDEQ on the Baseline Human Health Risk Assessment Work Plan (BHRA Work Plan), Baseline Ecological Risk Assessment Work Plan (BERA Work Plan), and Groundwater and Surface Water Data Summary Report (GW/SW Data Summary Report); and to discuss the proposed sampling plan for the Phase II Remedial Investigation. In addition, the meeting included discussions and project updates regarding the project schedule, Main Plant building demolition, and concrete reuse. The following individuals attended all or portions of the meeting as indicated below:

The following individuals attended all or portions of the Tuesday, January 16, 2018 meeting as indicated below:

- Mike Cirian USEPA
- David Berry USEPA (via telephone conference)
- Dick Sloan MDEQ (via telephone conference)
- Colleen Owen MDEQ (via telephone conference)
- Aimee Reynolds MDEQ (via telephone conference)
- Katie Morris MDEQ (via telephone conference)
- Gunnar Emilsson CDM Smith

- Sean Coan CDM Smith (via telephone conference)
- Erin Formanek CDM Smith (via telephone conference)
- John Stroiazzo Glencore
- Steve Wright CFAC
- Andrew Baris Roux Associates
- Michael Ritorto Roux Associates
- Laura Jensen Roux Associates
- Tom Biksey EHS Support (via telephone conference

The meeting agenda for Tuesday, January 16, 2018 included the following items:

- The group reviewed PowerPoint slides prepared by Roux Associates which highlighted the key items for discussion throughout the meeting including outstanding/upcoming project items, project schedule and path forward, preparation for the Phase II Remedial Investigation, and summaries for the comments provided by USEPA/MDEQ;
- The group reviewed the USEPA and MDEQ comments on the BHHRA Work Plan; and

The group reviewed the USEPA and MDEQ comments on the GW/SW Data Summary Report.

The following individuals attended all or portions of the Wednesday, January 17, 2018 meeting as indicated below:

- Mike Cirian USEPA
- David Berry USEPA (via telephone conference)
- Brian Sanchez USEPA (via telephone conference)
- Sherry Skipper USEPA (via telephone conference)
- Dick Sloan MDEQ (via telephone conference)
- Colleen Owen MDEQ (via telephone conference)
- Katie Morris MDEQ (via telephone conference)

- Gunnar Emilsson CDM Smith
- Sean Coan CDM Smith (via telephone conference)
- Erin Formanek CDM Smith (via telephone conference)
- John Stroiazzo Glencore
- Steve Wright CFAC
- Andrew Baris Roux Associates
- Michael Ritorto Roux Associates
- Laura Jensen Roux Associates
- Gary Long EHS Support (via telephone conference)

The meeting agenda for Wednesday, January 17, 2018 included the following items:

- The group reviewed the USEPA comments, the USEPA comments provided by Brian Sanchez, and MDEQ comments on the BERA Work Plan;
- Roux presentation and group discussion of the draft proposed sampling locations for the Phase II Remedial Investigation, including soil boring, monitoring well, surface water, sediment, and porewater locations;
- The group discussed public outreach and the proposed spring Community Liaison Panel/Public meeting and Site tour;
- The group discussed CFAC's intention to reduce the sampling frequency for Aluminum City wells;
- Glencore/CFAC provided an update regarding the Site demolition being conducted by Calbag;
- The group discussed the path forward for concrete reuse; and
- The group discussed the installation progress of the retaining wall at the South Percolation Ponds.

Technical Meeting Highlights and Paths Forward

- CFAC/Roux will prepare and submit responses to the comments provided by USEPA/MDEQ on the BHHRA Work Plan, BERA Work Plan, and GW/SW Data Summary Report. Following USEPA/MDEQ concurrence or additional comment regarding the responses, CFAC/Roux will revise the aforementioned documents for USEPA/MDEQ following the round(s) of comments;
- The group discussed the reasonably anticipated future land use of the Site in reference to the exposure areas defined in the HHRA Work Plan. It was agreed that the HHRA did not need to

evaluate residential scenarios in exposure areas where reasonably anticipated future use is expected to be commercial or industrial. However, in such instances, the HHRA will need to specify that if future use plans or expectations change, that the risk assessment would be revised/updated as appropriate to address such changes;

- The group discussed USEPA/MDEQ comments requesting the risk assessment evaluate groundwater beneath the Site as a potential source of potable water or irrigation water.
 CFAC/Roux indicated they do not agree with this approach; but indicated they would give it further consideration and respond to the comment;
- CFAC/Roux will submit interim risk assessment deliverables to USEPA/MDEQ for review and comment to provide additional details regarding the risk assessment assumptions and methodology beyond that included in the Work Plans. The specific items to be addressed in the interim deliverables and the schedule for submission will be identified in the responses to USEPA/MDEQ comments, as well as within the revised Work Plans;
- A background study will be completed as part of the Phase II Remedial Investigation and will be included in the risk assessment. A general description of the background study will be included in the Phase II SAP, but a separate Background SAP to define scope of work details will be provided to USEPA/MDEQ for comment prior to performing the work;
- USEPA requested Tier 3 analyses in their BERA Work Plan comments. Tier 2 analyses are currently proposed as part of the Phase II Remedial Investigation as an initial evaluation of contaminants of potential ecological concern (COPEC) bioavailability and toxicity to determine the need for Tier 3 analyses that may include toxicity testing, population evaluation, habitat evaluation, etc. CFAC may prefer to evaluate remedial options rather than pursue further Tier 3 studies in some areas. If Tier 3 analyses are warranted, a BERA WP Addendum will be submitted to establish data objectives, specify the study design and testing methods, and establish decision criteria for the weight-of-evidence evaluation;
- The draft proposed sampling locations for the Phase II Remedial Investigation were reviewed by the group. CFAC/Roux will provide USEPA and MDEQ a draft Sampling and Analysis Plan (SAP) with details for the Phase II Scope of Work for review in late February 2018 with the goal of starting the field work in May 2018. The Phase II Remedial Investigation will include, but is not limited to a soil boring program, monitoring well installation, two rounds of groundwater and surface water sampling, sediment and porewater sampling, a background study, and an investigation of the soil quality beneath the Main Plant building:
- Calbag is onsite and still demolishing the Main Plant building. The first four pot rooms and the
 West Rectifier Yard have been demolished and the pot room basements have been cleaned
 out. The demolition work will continue to proceed from west to east, with the anticipated
 completion of the remaining pot rooms within the next 90 days; and
- The pile sheeting and rip-rap trench at the South Percolation Ponds was installed in late December 2017. The removal of the concrete floor panels in the Flathead River is pending.

End	of Minutes	for Project Up	pdate/Technical	Meeting
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